

## Integrity Management Rule – Glossary of Terms

### **60-Day Condition:**

A defect or anomaly in the condition of the pipe that must be evaluated and repaired or remediated within 60 days of discovery. The rule identifies the following as 60-day conditions.

- A dent located on top of the pipeline (above 4 and 8 o'clock positions) with a depth greater than 3 percent of the pipeline diameter (greater than 0.25 inches for a pipeline diameter less than NPS 12)
- A dent located on the bottom of the pipeline that has any indication of metal loss, cracking or stress riser (NOTE: Top-of-the-pipe dents with metal loss, cracking or stress riser are an immediate repair condition)

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### **180-Day Condition**

A defect or anomaly in the condition of the pipe that must be evaluated and repaired or remediated within 180 days of discovery. The rule identifies the following as 180-day conditions.

- A dent with depth greater than 2% of the pipeline's diameter (0.25 inches in depth for a pipeline diameter less than NPS 12) that affects pipe curvature at a girth weld or a longitudinal seam weld
- A dent located on the top of the pipeline (between the 4 and 8 o'clock position) with a depth greater than 2% of the pipeline's diameter (0.25 inches in depth for a pipeline diameter less than NPS 12)
- A dent located on the bottom of the pipeline with a depth greater than 6 percent of the pipeline's diameter
- A calculation of the remaining strength of the pipe shows an operating pressure that is less than the current established maximum operating pressure at the location of the anomaly (using suitable calculational methods)
- An area of general corrosion with a predicted metal loss greater than 50% of nominal wall
- Predicted metal loss greater than 50% of nominal wall that is located at a crossing of another pipeline, or is in an area with widespread circumferential corrosion, or is in an area that could affect a girth weld
- A potential crack indication that when excavated is determined to be a crack
- Corrosion of or along a longitudinal seam weld
- A gouge or groove greater than 12.5% of nominal wall

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### **Baseline Assessment Plan**

A written plan produced by the operator that as a minimum: 1) identifies all segments of a pipeline system that could impact an HCA; 2) identifies the specific integrity assessment method(s) to be conducted on those segments; 3) specifies the schedule by which those integrity assessments will be performed; and 4) provides the technical justification for the selection of the integrity assessment method(s) and the risk basis for establishing the assessment schedule.

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### **Check Valve**

A valve that permits fluid flow in only one direction. Should the direction of flow reverse (for instance after a failure), the valve contains a mechanism that automatically prevents flow in the opposite direction.

<b>Continual Evaluation of Pipeline Integrity</b>	A program for conducting periodic integrity assessments and evaluating the results of those assessments to understand the current pipeline condition and integrity issues.
<b>Discovery of a Condition</b>	The date after an internal inspection run when an operator has adequate information about a defect, anomaly, or other pipeline feature to determine the need for repair. Depending on the circumstances, adequate information may be available when the preliminary report is completed, following an analytical evaluation that integrates information from other sources, following excavation, or following receipt of the final internal inspection report. In no case, can the date of discovery be later than the date of the final report.
<b>Emergency Flow Restricting Device (EFRD)</b>	A check valve or remote control valve.
<b>High Consequence Areas</b>	Regions of the United States where the consequences of a hazardous liquid leak or spill could be significant. This includes Unusually Sensitive Areas of the environment (defined in 195.6), high population areas (urbanized areas identified by the Census Bureau), other populated areas (other areas of concentrated population defined by the Census Bureau), and commercially navigable waterways.
<b>Immediate Repair Condition</b>	<p>A defect or anomaly in the condition of the pipe that requires immediate action to repair/remediate. The rule identifies the following as immediate repair conditions. Operators must immediately reduce operating pressure or shut down the line until repairs of these conditions are completed:</p> <ul style="list-style-type: none"> <li>• Metal loss greater than 80% of nominal wall regardless of dimensions</li> <li>• A calculation of the remaining strength of the pipe shows predicted burst pressure less than the established maximum operating pressure at the location of the anomaly (using suitable calculational methods)</li> <li>• A dent on top of the pipeline (above the 4 and 8 o'clock positions) that has any indication of metal loss, cracking, or stress riser</li> <li>• A dent located on top of the pipeline with depth greater than 6% of nominal pipe diameter</li> <li>• An anomaly that in the judgement of the person designated by the operator to evaluate the assessment results requires immediate action</li> </ul>
<b>Integration Of Data</b>	The process of bringing together all available risk and integrity-related data and information, and evaluating the combined impact of these diverse factors on risk.
<b>Integrity Assessment</b>	A method for determining the pipe's current condition. Acceptable methods include internal inspection, pressure testing, or other technology that the operator demonstrates can provide an equivalent understanding of the pipe condition.

<b>Integrity Management Program</b>	<p>A documented set of policies, processes, and procedures that includes, at a minimum, the following elements:</p> <ul style="list-style-type: none"> <li>• a process for determining which pipeline segments could affect an HCA,</li> <li>• a Baseline Assessment Plan,</li> <li>• a process for continual integrity assessment and evaluation,</li> <li>• an analytical process that integrates all available information about pipeline integrity and the consequences of a failure,</li> <li>• repair criteria to address issues identified by the integrity assessment method and data analysis (the rule provides minimum repair criteria for certain, higher risk, features identified through internal inspection),</li> <li>• a process to identify and evaluate preventive and mitigative measures to protect HCAs,</li> <li>• methods to measure the integrity management program's effectiveness, and</li> <li>• a process for review of integrity assessment results and data analysis by a qualified individual.</li> </ul>
<b>Integrity Management Program Framework</b>	A documented description of how an operator intends to implement (or has implemented) each element of an integrity management program.
<b>Preventive And Mitigative Measures</b>	<p>Activities designed to reduce the likelihood of a pipeline failure (preventive) and/or minimize or eliminate the consequences of a pipeline failure (mitigative). Examples of preventive measures include enhanced damage prevention practices, conducting periodic close interval surveys, or inspecting pressure relief devices more frequently. Examples of mitigative measures include the installation of emergency flow restricting devices, improving leak detection system capability, or conducting drills with local emergency responders. Reducing operating pressure is a measure that might impact both the likelihood and the consequences of a pipeline failure.</p>
<b>Remote Control Valve</b>	Any valve that is operated from a location remote from the valve site. Remote control valve actuation is usually achieved by signals initiated by the control center operator or the Supervisory Control and Data Acquisition system.
<b>Risk</b>	A measure that combines both the likelihood of conditions or events producing an undesired outcome with the type and magnitude of the resultant consequences.
<b>Risk Factors</b>	Parameters that can influence the likelihood and/or consequence of a pipeline release. There are many types of risk factors, including design (e.g., wall thickness, seam type), operations (e.g., maximum operating pressure, pressure cycles), maintenance and surveillance (e.g., patrolling frequency, valve maintenance practices), previous integrity assessment and repair results, operating experience (e.g., leak history, cathodic protection history), commodities being transported, emergency response procedures and preparedness, and proximity to and geo- physical features separating the pipeline from population, unusually sensitive environmental resources, and commercially navigable waters.
<b>Unusually Sensitive Areas USAs)</b>	Drinking water and ecological resources that are unusually sensitive to environmental damage from hazardous liquid pipeline releases. The criteria defining USAs is codified in Part 195.6.